

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 08-177499

(43)Date of publication of application : 09.07.1996

(51)Int.Cl. F02B 23/10  
F02M 61/14  
F02M 61/18  
F02M 69/04

(21)Application number : 06-316138

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(22)Date of filing : 20.12.1994

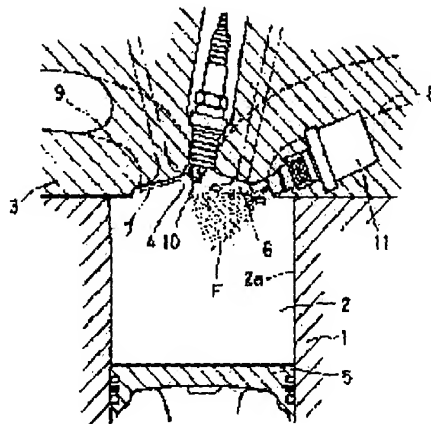
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### (54) DIRECT INJECTION AND SPARK-IGNITION TYPE INTERNAL COMBUSTION ENGINE

#### (57)Abstract:

**PURPOSE:** To decrease hydrocarbon in exhaust gas by widely dispersing fuel while preventing fuel from being deposited on an intake valve.

**CONSTITUTION:** A pair of intake valves 6 are provided on respective cylinders, and a fuel injection valve 11 is arranged between a pair of intake valves 6 and on a head surface to a cylinder side wall 2a. The fuel injection valve 11 is provided with a pair of injection holes, and the center lines of these injection holes intersect to each other in a combustion chamber 4. The fuel injection valve 11 is attached in such an attitude that the flat surface including the center lines of two injection holes perpendicular intersects the flat surface including the cylinder 2 center line. The spray is formed into a flat shape long in the axial direction of the cylinder 2 by the collision of sprays discharged from respective injection holes and does not collide with the intake valves 6. The apertures of respective injection holes are different from each other in order to promote atomization by the resonance action in the collision of two sprays.



#### LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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